Dry and warm weather has continued across Arkansas this week. The U.S. Drought Monitor report on October 6th shows that approximately 63% of the state is experiencing some level of drought. Although most of Northeast Arkansas does not appear impacted, soil levels in most areas are too low to plant wheat at this point. Slight chances of rain are forecasted for today, then another week of dry weather is expected.

Most wheat producers are delaying wheat planting until moisture is received. Fields that have been tilled up after summer crop harvest need a rain to prepare an adequate seedbed to plant wheat. The Arkansas Agriculture Statistics Report released on October 5th indicates that 4% of the intended wheat acres have been planted compared to a five year average of 8% and 8% last year at this time.

**Insecticide Seed Treatments in Wheat - Glenn Studebaker, Extension Entomologist**

Insecticide seed treatments at planting are an option growers may consider in Arkansas. Insecticide seed treatments will give control of early season aphids and fall infestations of the Hessian fly. However, the benefit of these seed treatments depends on the grower’s situation at the time of planting. Seed treatments will last generally about 3-4 weeks after planting. Most of the time we do not see issues from aphids causing problems in winter wheat in the fall, so it is doubtful a grower would receive much benefit from a seed treatment to control these pests. What about Hessian fly? Hessian fly remain dormant throughout the summer months in wheat stubble. Falling temperatures coupled with a significant rain event will trigger adult fly to emerge. In general this emergence...
occurs in late September and early October. Hessian fly adults only live for a few days during which time they mate and lay their eggs on seedling wheat. If wheat is planted after mid-October, it will usually avoid infestations of Hessian fly and a seed treatment will be of little benefit. However, if a grower decides to plant a little early, a seed treatment may be of benefit, particularly if Hessian fly has been a problem in the area in the past. Late planting dates do not always guarantee Hessian fly will not be a problem. We have seen years when September and early October were very dry (like this year) and Hessian fly did not emerge due to a lack of sufficient rainfall to trigger emergence. In these years, wheat planted after mid-October had significant infestations of Hessian fly. Many areas of the state have been experiencing a good dry spell, which has been a plus for getting other crops harvested, but this could increase our chances of Hessian fly in later planted wheat. Growers may want to consider an insecticide seed treatment this year.

For additional information on Insect Management in Wheat, consult the MP404 at: http://www.uaex.edu/publications/pdf/mp404/Chapter8Wheat.pdf

**Fungicide Seed Treatments for Preventing Wheat Diseases - Dr. Terry N Spurlock**

As a general rule, a fungicide seed treatment is the best chance to make the most precise fungicide application all year long. This is true for any crop grown on a large acreage. Further, the best opportunity to manage diseases with a fungicide is prior to disease development and when environmental conditions would favor a particular disease. Presently, the soil is dry, likely too dry to plant wheat in many fields, and we’ve experienced an extended period of warm weather. Warm and dry soil doesn’t favor most seedling diseases (especially those caused by *Pythium* spp.). However, weather can change quickly and soil conditions at planting or during seedling emergence may be cooler and be more favorable for disease development. This is why seed treatment fungicides are very useful tools to prevent seedling disease. They simply offer a “window” of protection against a wide range of potential disease causing fungi and *Pythium* spp. Triazole chemistries (such as tebuconazole, difenoconazole, and prothioconazole) have demonstrated to be effective in preventing diseases caused by true fungi such as loose smut, Stagonospora, and other seedling diseases. Mefenoxam and metalaxyl have good efficacy against *Pythium* spp. and newer SDHI chemistries like sedaxane, have demonstrated good efficacy against early infecting *Rhizoctonia* spp.

For additional information on wheat diseases and their management, consult the MP404 at:

http://www.uaex.edu/publications/pdf/mp404/chapter7wheat.pdf
Anthem Flex Receives 24c Label for Ryegrass Control in Wheat. Dr. Bob Scott

For about 4 years now my wheat weed control program has been focused on pyroxsulfone, the only new product for ryegrass control to come along since the introduction of the ALS herbicides Osprey and Power Flex around 10 years ago. Pyroxsulfone is the active ingredient in Zidua and Anthem Flex in wheat and is also found in several soybean and corn premixes. It controls annual ryegrass very well when applied prior to ryegrass germination. The only problem is that some injury issues have popped up in wheat over the past couple of years that have limited both the Zidua and Anthem Flex labels to delayed PRE or early POST applications only. While better than nothing these applications are prone to allow ryegrass to germinate and a true PRE would be much more beneficial in terms of early season ryegrass control.

So, why no PRE label? For several years, at least the first 3 that we looked at Anthem Flex/ Zidua we did not see any injury from PRE applications. Then it was pointed out that there appeared to be some varietal tolerance issues for and some time we tried to quantify this, come up with a list of tolerant and susceptible varieties of wheat to pyroxsulfone. But our results were erratic. This led me to believe that tolerance was not so much based on genetics but rather wheat seed vigor and timing of rainfall. In addition I believe that planting depth, soil type and rate also play a major role. There were a few varieties such as Terral 8861 and Armor Ricochet that seemed to be very susceptible and others like most Delta Grow and Pioneer varieties that seemed tolerant. Then some that were in the middle and were OK most of the time like the AGS variety 2060. But before you call there is no list! Every time we thought we knew something for sure, we would get a surprise and a “tolerant” variety would come up with some injury or vice versa?

For the vast majority of trials and varieties the injury that I am talking about amounted to around 10-15% stunting and stand loss. The wheat usually recovered in as little as 4-6 weeks and the ryegrass control was exceptional. That’s what led to the labeling of pyroxsulfone as only delayed pre or POST. It has worked well in a tank-mix early post with Axial XL when applied to 3-4 leaf ryegrass or with Axiom applied in the spring on 1-2 lf wheat followed by Axial XL in the spring. The problem with this is the ryegrass that is coming through at planting time and might have been controlled with a pre application is being controlled by Axial XL, a herbicide to which we have documented ryegrass resistance already. A true pre application of Anthem Flex/Zidua would be more valuable for resistance management than the current delayed PRE or POST.

This fall FMC Corporation decided to support the expansion of the Anthem Flex label, with a special State Label, currently in Arkansas, for a true PRE application of Anthem Flex in wheat. This 24c went into effect on 10/5/15 and is good for the next few years pending any problems. The label is for drill seeded wheat only and has specific recommendations on planting depth (from 0.5 to 1.5 inches) and warnings about injury potential, but again there is no variety list.
I know that some of you have experimented with PRE applications of this active ingredient already, keep in mind that dry conditions followed by a heavy rain after planting could be a recipe for injury, and that has been our weather pattern this year. I would not use Anthem Flex on “dusted in” wheat, unless you are getting into some moisture for germination before a rain.

The Anthem Flex 24C is an indemnified label. That is FMC accepts no responsibility for crop injury. You can find the label at FMC’s website or at the Arkansas State Plant Boards Website (http://plantboard.arkansas.gov). My wheat weed control program has been sponsored for several years by the Arkansas wheat promotion board and various Industry grants. Without this combined support and cooperation we would not be able to provide Arkansas wheat growers with a battle plan for resistant ryegrass or work or the development of 24C labels such as the one discussed here. This support is greatly appreciated.

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